

# 1 Attitudes held by teachers when using mobile devices as language aids

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## Abstract

The aim of the study is to establish and understand the attitudes teachers hold when using mobile devices as language aids. Data was collected using a mixed method approach. Both quantitative and qualitative questionnaires were disseminated using ‘closed/private’ Facebook groups related to Teaching English as a Foreign Language (TEFL) and Teaching English to Speakers of Other Languages (TESOL) to focus the survey on participants that had experience in this field. Approximately 267 participants completed the quantitative questionnaire, whilst only eight participants completed the qualitative questionnaire. The results from the quantitative questionnaire demonstrate that participants acknowledge Mobile Assisted Language Learning (MALL) devices to be beneficial. However, according to the qualitative results, even though participants recognise the potential MALL devices can provide, most participants did not use MALL devices within their classroom. Reasons for this, according to the qualitative data, are due to the teachers’ lack of digital literacy and competency, as well as the potential difficulty of managing classroom disruptions and behaviour when using MALL devices.

**Keywords:** MALL, digital literacy, collaboration, pedagogy.

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## 1. Introduction

Chartrand (2016) defines mobile devices as small handheld computers that either have a touch display or a small keyboard. MALL therefore refers to the “use of mobile technology in language learning” (Miangah & Nezarat, 2012, p. 309). According to Chartrand (2016), the launch of the first iPod Touch in 2007 marked the beginning of integrating handheld devices into the education market (Apple, 2015). This was the first device that enabled users to listen, watch, and read, all on one device. This was further advanced by the iPad, released in 2010, which saw educators and learners use the same device. Following Apple’s success, various education-related software and devices were released, and educational institutions began to show interest in using these devices as language tools (Banister, 2010).

If mobile devices are able to assist students in their language acquisition, then teachers should have developed a range of competences and a range of attitudes towards them. Previous research indicates a positive correlation between students’ ability to learn a language and using mobile devices (Begum, 2011; Gromik, 2012). However, the research currently available appears to emphasise how MALL devices are able to aid students in relation to their acquisition of certain language skills (Lu, 2008) rather than address the attitudes held by teachers, or indeed their willingness to deploy them within the classroom. Whilst Ghriebs (2015) has conducted similar research, only seven participants, TEFL university teachers who worked within that university, took part were in this research. In comparison to this research, Ghriebs (2015) uses a very small sample and with all of the participants working within the same university, there is the potential for bias resulting from the participants sharing similar recent experiences.

Aside from the usefulness to the student, there are various other factors that could interfere with teachers’ readiness to use mobile devices, such as the digital literacy of the teacher. If teachers lack confidence or knowledge when using MALL devices, then it is unlikely they will use them in their classrooms (Kebritchi, 2010).

Of course it is at the discretion of the teachers and their institutions as to whether they are willing to incorporate MALL devices within their lessons. Therefore, this research addresses the following questions:

- To what degree are teachers' attitudes towards MALL influenced by their digital literacy and their competencies in using MALL?
- In what ways do teachers think MALL is beneficial or detrimental to language learning?

In answering these questions, this research will establish whether teachers perceive MALL devices to be beneficial or detrimental to language learning, and attempt to understand why teachers hold such opinions.

## **2. Method**

This inquiry is interpretivist in nature, where behavioural patterns are observed and assumptions are made about both context and participants based on interpretation of data (Ibrahim, 2014). Interpretivism is suitable for this research as it is based on quantified data regarding the behaviour and attitudes of participants to which the researcher has no direct access and must therefore infer. Interpretivist frameworks explore the attitudes and motives, informed by anonymous qualitative survey data, based on subjective experiences that are linked to context and time (Edirisingha, 2012).

The methodological approach that is best suited for the interpretivist framework is mixed (Ibrahim, 2014), as it can be used to both establish and understand the attitudes the teachers hold towards MALL devices. Mixed methodology refers to collecting, analysing, and integrating both quantitative and qualitative research within a single study (Imran & Yusoff, 2015). The methodology involved in collecting data for this study is referred to as 'mixed methods lite', meaning that the quantitative data was the dominant methodology used (Greene, 2012). The quantitative study was used to describe and define patterns of behaviours

and attitudes amongst the participants whilst the qualitative data provides the context necessary to enrich the researcher's understanding of motives behind the behavioural patterns, without necessarily influencing the analysis by hypotheses. The qualitative data in this case provided further understanding of the results, meaning greater insight into inferences, which formulate the findings of the research (Ponce & Pagán-Maldonado, 2015). This research follows the concurrent mixed method design of triangulation in that the qualitative section and the quantitative section are analysed individually and then compared and following that a conclusion is drawn incorporating both data sets (Creswell & Plano Clark, 2007).

In order to collect quantitative and qualitative data, it was decided that the most efficient research instrument would be an online questionnaire, which was created using Google Forms. Considering that the study is an evaluation of attitudes, there was a need to access demographically diverse individuals, with differing experiences. In comparison to face-to-face interviews, or telephone-based interviews, online questionnaires are also able to provide participants with a certain amount of anonymity. This is presumed to accumulate more accurate data, as the researcher is minimising social desirability pressures (Lelkes et al., 2012). Social desirability pressures, in this case, could be teachers feeling incompetent or ashamed by their inability to use MALL devices successfully, particularly as the researcher's aim was to assess confidence.

According to Zhang, Tousignant, and Xu (2012), it is becoming increasingly important for educators to be capable and confident in their digital literacy. If participants are unable or unwilling to use MALL devices, they may feel a certain pressure to conform, which may result in less honest results or simply not participating in the data collection process. Online questionnaires however provide participants with a degree of anonymity, meaning participants are more likely to provide honest answers. It was therefore decided to post the questionnaire as a link within the official TEFL/TESOL Facebook groups, such as *TEFL Teachers in Spain* and *TEFL Org UK*. These were all private/closed groups with members being associated with TEFL/TESOL and were either teachers, students, or recruiters within the field.

Convenience sampling was selected, which is a type of nonprobability or non-random sampling, and participants are those that meet certain practical criteria, in this case their willingness to participate (Etikan, Musa, & Alkassim, 2016), and their membership of the TEFL/TESOL Facebook groups.

The quantitative questionnaire, which participants answered using a Likert scale, collected a total of 267 results from a wide demographic, as demonstrated in Table 1 below.

Table 1. Demographics of quantitative data by age range of participants (N=267)

Age Range	Count	Percentage
<20	2	0.75%
20-35	128	47.92%
35-50	106	39.70%
50-67	30	11.24%
67+	1	0.37%

In regards to the qualitative questionnaire, data was collected from only eight participants. Whilst there is no clear indication as to why fewer participants responded to the qualitative questionnaire (given that both questionnaires were disseminated in the same way and to the same group), it could be explained by the fact that the Likert scale based quantitative questionnaire was less time consuming and easier to complete whereas the qualitative questionnaire provided participants with open-ended questions meaning that answers were not suggested to the respondent, but instead participants were required to answer in their own words; responses were to a degree more descriptive but also more time consuming. The demographics of the qualitative questionnaire are presented in Table 2.

Table 2. Demographics of the Qualitative Data (N=8)

Native English speakers	Non Native English speakers
3	5
Taught in European Union	Taught outside of European Union
3	5

Taught in private schools	Taught in public schools
4	4
Full time career as EFL teacher	Other career
8	0

In order to complete this study ethically, the researcher followed the guidelines established by the British Educational Research Association (BERA, 2011). Whilst Facebook was used, it was only utilised as a medium to disseminate the questionnaire. Furthermore, prior to respondents completing the questionnaires, a consent form was provided and access to the questionnaire was limited to those who completed it.

### 3. Results and discussion

#### 3.1. To what degree are teachers’ attitudes towards MALL influenced by their digital literacy and their competencies in using MALL?

According to the *Teacher Mobile Learning Adoption Model* (Mac Callum, Jeffrey, & Kinshuk, 2014), one of the main factors, which has been found to directly impact teachers’ adoption of technology, is the teachers’ ability to use digital technology, i.e. their digital literacy. Digital literacy is measured within the questionnaire by means of assessing the participant’s technological ability with regards to mobile software use, with particular focus on language learning. Although all participants must, to some degree, have an understanding of how to use technology, considering the means by which the questionnaire was disseminated, simply accessing social media and completing a questionnaire requires less technological competence compared to that required in deploying MALL effectively in the classroom.

In order to assess teachers’ ability to implement MALL devices, participants were given the statement: ‘I am confident to use mobile devices for language learning purposes’. Results are displayed in Table 3.

Table 3. Results to teachers' confidence in using MALL devices for language learning purposes (N=267)

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	No Answer
93	124	33	13	2	2
35%	46%	12%	5%	1%	1%

These results indicate that the majority of the participants (81%) answered positively: agreed (46%) and strongly agreed (35%). This suggests that the majority of participants feel confident enough in their digital literacy that they would be able to use MALL devices successfully within their teaching practices.

However, 12% of participants also stated that they neither agree nor disagree. This could be due to participants not feeling sufficiently competent in their ability to successfully adopt technology, and may require training or support in how to implement such devices successfully, thus achieving digital competency. In order to establish the level of digital competency teachers currently have, the following statement was provided: 'I need training/further training on how to use mobile devices for language learning purposes'. Results are provided in [Table 4](#).

Table 4. Training/more training on how to use MALL devices for language learning purposes (N=267)

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	No Answer
55	116	59	26	11	0
21%	43%	22%	10%	4%	0%

The results from [Table 4](#) indicate that the majority (64%) of participants agree (43% agree, 21% strongly agree) that they require training. However, as presented in [Table 3](#), the majority of the participants also agreed that they were already confident in their ability to use MALL devices within the classroom. This could indicate that the amount of training teachers receive will not necessarily have a direct effect on the confidence teachers have when using mobile devices

as language aids, as it appears that training has only a limited impact on the attitudes that teachers hold. Furthermore, 22% of participants also stated that they neither agree nor disagree to requiring training/more training. This could indicate that, whilst teachers may perceive training to be potentially beneficial, they are unsure whether it will aid in their ability to use MALL devices.

Based on the participants’ self-assessment, we can summarise that the majority of participants are digitally literate and confident in their ability to use MALL devices. However, whilst participants claim to be confident in their ability, the majority of participants also state that they require further training in order to be able to use MALL devices successfully. It could, therefore, be interpreted that the amount of training teachers receive does not necessarily have a direct correlation with the confidence level teachers have when using MALL devices, indicating that training has only a limited impact on the attitudes the teachers hold.

**3.2. In what ways do teachers think MALL is beneficial or detrimental to language learning?**

In establishing the support MALL devices can provide to the students, we can determine their potential net benefits within the classroom. Whether the teachers deem MALL to be a net benefit or a detriment may influence their overall attitudes to it, particularly in a pedagogical sense. One of the benefits MALL devices can provide students with is the ability to enhance learning collaborations. In order to evaluate this, the researcher provided the participants with the following statement: ‘mobile devices can increase collaboration between students within the classroom’. Results are presented in [Table 5](#).

Table 5. Devices increase collaboration between students (N=267)

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	No Answer
63	122	53	25	1	3
24%	46%	20%	9%	0%	1%



Results indicate that the majority of participants (70%) either agreed or strongly agreed that mobile devices are able to increase collaboration between students in the classroom. Increasing collaboration between students has pedagogical benefits, as collaboration can allow the teacher to interact with all students simultaneously with the use of MALL, which may result in more manageable and efficient teaching. However, 20% of participants also indicated that they neither agree nor disagree. Reasons for this could be that the participant lacks experience with MALL devices.

Whilst collaboration is considered a beneficial factor of MALL, research indicates that teachers may find using MALL devices in the classroom to be too distracting for students (Tesch, Coelho, & Drozdenko, 2011). To evaluate whether the participants also perceive MALL devices to be too difficult to manage, the following statement was provided: ‘using mobile devices within the classroom for language teaching purposes will be too difficult to discipline and manage’. Results are demonstrated in Table 6.

Table 6. MALL devices being too difficult to discipline and manage (N=267)

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	No Answer
22	66	81	83	14	1
8%	25%	30%	31%	5%	0%

According to the results displayed, 36% of individuals both disagreed and strongly disagreed, compared to 33% who agreed and strongly agreed. Furthermore, 30% of participants neither agree nor disagree. It appears that these results are inconclusive. Reasons for these inconclusive results could be related to the teachers’ specific experience of MALL devices. For example, students playing a game are more likely be more engaged compared to reading or doing other non interactive activities. Therefore, teachers who use MALL devices solely for playing games may have better experiences. Teachers who use MALL devices for other less interactive and engaging activities, may find that students become distracted and do other irrelevant activities. However, due to the nature of MALL devices, it is difficult for a teacher to quantify the amount of work

done by the student and this is a potential reason as to why 30% of respondents neither agree nor disagree.

In order to have a better understanding of participants’ opinions towards MALL devices as language aids, the following statement was presented: ‘in general, I think that mobile devices can be used successfully for language learning purposes and can be useful for students’. Results are presented in [Table 7](#).

Table 7. Results to mobile devices being used successfully as language aids (N=267)

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	No Answer
123	118	16	7	1	2
46%	44%	6%	3%	0%	1%

These results indicate that the majority of participants strongly agreed (46%) and 44% also agreed to MALL devices successfully enabling language learning, so a 90% positive response. These results indicate that participants perceive MALL devices to be beneficial to students.

**3.3. Qualitative data**

However, in contradiction to the quantitative section above, according to the qualitative data, when participants were asked: ‘what technology do you currently have access to, and what do you expect your students to have access to?’, six out of the eight participants indicated that they did not permit their students to use MALL devices within the classroom. According to results from this question, one of the main factors which appears to have influenced teachers’ unwillingness to use MALL devices in the classroom is their own digital literacy. Whilst we have suggested within the quantitative results that participants (the teachers) must be digitally literate to some degree, results within this section indicate that participants are not taking sufficient advantage of the potential that MALL devices can provide. One of the participants who did allow MALL devices indicated: “I allow the students to use their mobiles to access

dictionaries or look up information” (Participant 5). This indicates that even though this participant understood the potential these devices could provide, they only used them for basic tasks. Reasons for this, according to Participant 8, are: “most of the teachers are not prepared or they don’t know how to include the devices in the class planning and activities”. This quotation indicates that participants are not sufficiently trained and therefore lack knowledge on how to use MALL devices successfully, which prevents participants from capitalising on their full potential, and explains their unwillingness to use MALL devices. A similar conclusion was also reached by [Holden and Rada \(2011\)](#).

Another barrier, which could also have an effect on why participants are unwilling to use MALL devices, might be the difficulty in maintaining discipline in the classroom when using them. When participants were asked ‘do students bring their mobile devices to class?’, Participants 4 and 7 state that students are: “not allowed to use them (mobile devices) in the classroom”. This issue of management and discipline is another possible indication of why teachers are unwilling to implement MALL devices in the classroom. This is further supported as Participant 4 recognises the potential MALL devices can provide, stating: “if students were allowed to use their mobile devices during class, it would facilitate the implementation of more interactive and meaningful activities in ESL context”. This quotation indicates that, even though the strengths of MALL devices are recognised, it appears that either the teachers or their management are still unwilling to implement MALL devices in the classroom. Due to lack of direct access to the participants it is unclear who is prohibiting the teachers from using MALL devices, but we can infer it is likely to be the school management or those responsible for setting education policies.

## 4. Conclusions

Results from both the quantitative and qualitative data appear to contradict one another. According to the quantitative data, participants indicated that they were confident in their ability to use mobile devices for language learning within the classroom. However, the data from the qualitative questionnaire reveals that

participants solely refer to using MALL devices for basic tasks. This could indicate that, even though many teachers believe they are digitally literate, they may still require training to deploy MALL in the class, and/or support for this from the school management/education policy. Although, as presented in the quantitative section, it is not entirely clear whether training has a direct impact on teachers' digital competence level.

However, regardless to how useful MALL devices are in enabling language learning, if there is prohibition emplaced by either the school or the teachers themselves, teachers will be unwilling/ unable to integrate MALL devices into their classroom. The results from the quantitative data indicate that respondents identify that MALL devices are able to assist language learning, as well as enhance student collaboration within the classroom. Participants also indicate concern over the teachers' ability to manage students' behaviour when using MALL devices. Results from the quantitative section appear to be inconclusive in regards to behaviour and management, however, within the qualitative section, two participants stated that students were prohibited from using MALL devices within the classroom. This problem of behavioural management coupled with the inability to use these devices to their full potential could indicate that teachers are simply unwilling or unable to invest the time into using and implementing MALL devices, and instead are left to rely on traditional teaching methods. This could indicate that all the acknowledged benefits of MALL devices, including the pedagogical benefits, are minimised if MALL devices are banned from class by school management, educational policy, or common practice.

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**Professional development in CALL: a selection of papers**

**Edited by Christina Nicole Giannikas, Elis Kakoulli Constantinou, and Salomi Papadima-Sophocleous**

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